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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,655

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1333 7590 01/06/2010  
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EXAMINER

CLARK, GREGORY D

ART UNIT

PAPER NUMBER

1794

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,655	<b>Applicant(s)</b> CAILLAUT ET AL.	
	<b>Examiner</b> GREGORY CLARK	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

The examiner acknowledges receiving the applicants' arguments dated 10/07/2009. Claims: 1-9 original and 10 cancelled.

Rejections and objections made in previous office action that does not appear below have been overcome by applicant's amendments and therefore the arguments pertaining to these rejections/objections will not be addressed.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

**The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).**

- 1. Claims 1-4, 8 and 9 are rejected under 35 U.S.C. 102(e) as being unpatentable by Kapusniak (20050157147).**

2. **Regarding Claims 1-4**, Kapusniak discloses an inkjet recording element containing a support having thereon an ink receiving layer containing particles of an aluminosilicate (abstract). Kapusniak further discloses that the aluminosilicate can be natural allophone (paragraph 11), synthetic allophone like (paragraph 14), and amorphous (paragraph 14) and acidic (paragraph 40).

3. **Regarding Claims 8 and 9**, Kapusniak discloses an ink jet recording element containing hydrophilic binders such as polyvinyl alcohol or gelatin (paragraph 32).

4. **Claims 1-4, 8 and 9 are rejected under 35 U.S.C. 102(e) as being unpatentable by Kapusniak (2005/0158486).**

5. **Regarding Claims 1-4**, Kapusniak discloses an inkjet recording element containing a support having thereon an ink receiving layer containing particles of an aluminosilicate (abstract). Kapusniak further discloses that the aluminosilicate can be natural allophone (paragraph 13), synthetic allophone like (paragraph 13), and amorphous (paragraph 13) and acidic (paragraph 39).

6. **Regarding Claims 8 and 9**, Kapusniak discloses an ink jet recording element containing hydrophilic binders such as polyvinyl alcohol or gelatin (paragraph 22).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapusniak (20050157147).**

**8. Regarding Claim 6,** Kapusniak discloses that the aluminosilicate makes up 5 to 30% of the particles in the ink receiving layer (paragraph 33). The aluminosilicate being acidic was discussed in sections 2 and 5. The applicant claims an ink receiving layer containing between 5 and 95% aluminosilicate particles.

Kapusniak does not teach the exact same range as recited in the instant claim, however the ranges do touch and there is significant overlap. Such particles are known to be effective at absorbing ink and a person of ordinary skill in the art would adjust the particle level to optimize the absorption capacity of the receiving layer.

One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Kapusniak overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious

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to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

**9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable by Kapusniak (20050157147) in view of Schliesman (6129785).**

**10. Regarding Claim 7**, Kapusniak discloses that the aluminosilicate can be natural allophone (paragraph 11), synthetic allophone like (paragraph 14), and amorphous (paragraph 14) and acidic (paragraph 40). Kapusniak does not teach a pH range for the aminosilicate. The applicant claims a pH range of 1.5 and 5.5 for the receiving layer.

Kapusniak discloses the claimed invention except for giving the pH of the receiving layer. The examiner takes the position that having a lower pH affects the overall ink receiving layer performance.

Schliesman teaches that coating compositions with acidic pH values have been found to have improved holdout of the ink jet ink dyes on the paper surface as compared to conventional alkaline coating compositions having basic pH values. The

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improved holdout results in enhanced color saturation and better overall print quality. It also reduces dye penetration to the opposite side of the sheet (column 2, 46-56).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the pH through routine experimentation in order to optimize to the overall print quality which would have included the range claimed by the applicant.

**11. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapusniak (2005/0158486).**

**12. Regarding Claim 6,** Kapusniak discloses that the aluminosilicate makes up 5 to 30% of the particles in the ink receiving layer (paragraph 32). The aluminosilicate being acidic was discussed in sections 2 and 5. The applicant claims an ink receiving layer containing between 5 and 95% aluminosilicate particles.

Kapusniak does not teach the exact same range as recited in the instant claim, however the ranges do touch and there is significant overlap. Such particles are known to be effective at absorbing ink and a person of ordinary skill in the art would adjust the particle level to optimize the absorption capacity of the receiving layer.

One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Kapusniak overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including

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the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

**12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable by Kapusniak (2005/0158486) in view of Schliesman (6129785).**

**14. Regarding Claim 7**, Kapusniak discloses that the aluminosilicate can be natural allophone (paragraph 13), synthetic allophone like (paragraph 13), and amorphous (paragraph 13) and acidic (paragraph 39). The applicant claims a pH range of 1.5 and 5.5 for the receiving layer.

Kapusniak discloses the claimed invention except for giving the pH of the receiving layer. The examiner takes the position that a lower pH and the overall ink.

Schliesman teaches that coating compositions with acidic pH values have been found to have improved holdout of the ink jet ink dyes on the paper surface as compared to conventional alkaline coating compositions having basic pH values. The improved holdout results in enhanced color saturation and better overall print quality. It also reduces dye penetration to the opposite side of the sheet (column 2, 46-56).



It would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the pH through routine experimentation in order to optimize to the overall print quality which would have included the range claimed by the applicant.

**15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kapusniak (20050157147) in view of Doronin (RU 2205685).**

**16. Regarding Claim 5,** Kapusniak further discloses that the aluminosilicate can be natural allophone (paragraph 11), synthetic allophone like (paragraph 14), and amorphous (paragraph 14) and acidic (paragraph 40). Kapusniak does not disclose the means by which the aluminosilicate is made acidic. Doronin discloses a method for preparing aluminosilicate involving treatment with nitric acid (abstract)

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teaching of Kapusniak and Doronin before him or her to modify aluminosilicate preparation method of Kapusniak to include the preparation of aluminosilicate involving nitric acid of Doronin because Kapusniak uses an amorphous aluminosilicate and the preparation method taught by Doronin could easily be incorporated.

The suggestion/motivation for doing so would have been that the preparation method taught by Doronin gives porous aluminosilicate composites suitable as adsorbents with an increased strength of material (abstract).

**Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kapusniak (2005/0158486) in view of Doronin (RU 2205685).**

17. **Regarding Claim 5**, Kapusniak discloses that the aluminosilicate can be natural allophone (paragraph 13), synthetic allophone like (paragraph 13), and amorphous (paragraph 13) and acidic (paragraph 39). Kapusniak does not disclose the means by which the aluminosilicate is made acidic. Doronin discloses a method for preparing aluminosilicate involving treatment with nitric acid (abstract)

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teaching of Kapusniak and Doronin before him or her to modify aluminosilicate preparation method of Kapusniak to include the preparation of aluminosilicate involving nitric acid of Doronin because Kapusniak uses an amorphous aluminosilicate and the preparation method taught by Doronin could easily be incorporated.

The suggestion/motivation for doing so would have been that the preparation method taught by Doronin gives porous aluminosilicate composites suitable as adsorbents with an increased strength of material (abstract).

### **Response to Arguments**

The applicant argues that Kapusniak '147 and '486 fail to specifically teach particles submitted to an acidic treatment.

The examiner counters that Kapusniak discloses each type of aluminosilicate claimed by the applicant [natural allophone (paragraph 13), synthetic allophone like

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(paragraph 13), and amorphous (paragraph 13)] and the aluminosilicate can be acidic (paragraph 39). As Kapusniah discloses acidic aluminosilicate used in the ink receiving layer, the claim limitations are therefore met.

The applicant argues that Kapusniah fails to teach a pH value and Schliesman's teaching of pH is limited to distinct materials.

The examiner counters that Schliesman teaches that acidic pH ranges have been found to have improved holdout of the ink jet ink dyes on the paper surface as compared to conventional alkaline coating compositions having pH values. As Schliesman is directed toward the effect that pH has on ink jet dyes, at the time of the invention it would have been obvious to one of ordinary skill in to have tested acidic pH ranges which would have included the overlapping portion of the range to achieve improved holdout results, enhanced color saturation and better overall print quality.

The applicant argues that Doronin's treatment of aluminosilicate is directed toward montmorillonite and alumina materials only .

The examiner counters that the treatment of aluminosilicate with an acid is not considered novel. It would have been obvious to a person of ordinary skill in the art at the time of the invention to have selected from known methods to render aluminosilicates acidic which would have included treatment with nitric acid as disclosed by Doronin which reads on the applicants' limitations.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY CLARK whose telephone number is (571)270-7087. The examiner can normally be reached on M-Th 7:00 AM to 5 PM Alternating Fri 7:30 AM to 4 PM and Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 1794

GREGORY CLARK  
Examiner  
Art Unit 1794